U.S. Patent Appln. No. 10/549,493 Amendment Reply to Office Action dated November 23, 2009

AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of separating a particle fraction from a particle stream, wherein comprising the steps of:

separating the particles of the particle stream are separated in a fluid in a container under the influence of gravitational force based on a difference in vertical velocity, wherein the fluid and the particles are moved in a substantially horizontal direction defining a relative direction of movement, wherein means are provided for causing the fluid to move in the relative direction of movement;

collecting and wherein at a first location a first particle fraction at a first location; and is collected, and at a second location somewhat removed from the first location,

collecting a second particle fraction is collected in a respective collecting means[[,]] at a second location somewhat removed from the first location,

wherein introduction of the particles into the fluid occurs in a particle size-dependent manner at different locations along the relative direction of movement, such that larger particles are introduced closest to the collecting means with regard to the horizontal directional component in said relative direction of movement wherein baffles are provided for causing the fluid to move in the relative direction of movement, wherein the baffles are placed maximally 3x the diameter of spread of the particles that spread out the most of the particle fraction spreading out the most.

- 2. (Previously presented) A method according to claim 1, wherein the particles are introduced into a vessel having a substantially circular horizontal cross section and the fluid is moved uniformly in the circumferential direction in the vessel.
- 3. (Currently amended) A method according to claim 12, wherein a container is used wherein the means for causing fluid movement are formed by baffles placed in the vessel and radiating from a shaft placed vertically in the centre of the vessel, toward the circumferential wall of the vessel.

Amendment

Reply to Office Action dated November 23, 2009

- 4. (Currently amended) A method according to claim 1, wherein as the fluid is a liquid medium is used.
- 5. (Currently amended) A method according to claim 4, wherein a the liquid medium is used having has a density lower than that of the particles.
- 6. (Currently amended) A method according to claim 5, wherein a the liquid medium is an aqueous medium.
- 7. (Previously presented) A method according to claim 1, wherein the particle stream is formed by particles of a waste stream.
- 8. (Previously presented) A method according to claim 7, wherein the waste stream to be separated contains metal particles.
- 9. (Previously presented) A method according to claim 7, wherein the particle stream contains plastic particles.
- 10. (Previously presented) A method according to claim 1, wherein prior to their introduction into the fluid, the particles are subjected to a classification treatment.
 - 11. (Cancelled)
- 12. (Currently amended) A method according to claim 1, wherein at the underside of the container the first relatively heavy and the second relatively light particle fractions are discharged separately via via respective discharge openings in the container.
 - 13. (Cancelled)

Amendment

Reply to Office Action dated November 23, 2009

- 14. (Previously presented) A method according to claim 1, wherein the fluid has a vertical velocity such that the fluid originally present at the feed level in a container having a substantially circular horizontal cross section, will during one circulation of the fluid have moved at least as far as the collecting means.
- 15. (Withdrawn) An apparatus for the separation of particles, which apparatus comprises a vessel provided with baffles radiating from a shaft placed concentrically in the vessel and in the direction of a circumferential wall of the vessel, and wherein the vessel at the bottom or top is provided with at least two collecting means having their own discharge means, wherein there are at least 10 baffles.
- 16. (Withdrawn) An apparatus according to claim 15, wherein the circumferential wall of the vessel, which in use is in contact with the fluid, is designed for rotating at the same rotational speed as the shaft.

17-18. (Cancelled)

- 19. (Withdrawn) An apparatus according to claim 15, wherein there are at least 20 baffles.
- 20. (Withdrawn) An apparatus according to claim 15, wherein there are at least 30 baffles.